

REMARKS

This application was originally filed on 1 December 2000 with twenty claims, two of which were written in independent form. No claims have been allowed. Claims 7, 9, 12, and 16 have been amended in a non-narrowing manner to clarify what is being claimed and to correct punctuation errors.

Figures 2 and 5 were objected to for failing to state "Prior Art" in the case of Figure 2 and for including the reference character 516 in Figure 5. Figures 2 and 5 have been amended to overcome this objection.

Claims 7, 9, 12, and 16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, or objected to for informalities. The applicant thanks the Examiner and has amended Claims 7, 9, 12, and 16 to correct the issues pointed to by the Examiner.

Claim 1 was rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 5,892,851 to Nguyen ("Nguyen"). The applicant respectfully disagrees.

"A person shall be entitled to a patent unless," creates an initial presumption of patentability in favor of the applicant. 35 U.S.C. § 102. "We think the precise language of 35 U.S.C. § 102 that, "a person shall be entitled to a patent unless," concerning novelty and unobviousness, clearly places a burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103, see *Graham and Adams*." *In re Warner*, 379 F.2d 1011, 1016 (C.C.P.A. 1967) (referencing *Graham v. John Deere Co.*, 383 U.S. 1 (1966) and *United States v. Adams*, 383 U.S. 39 (1966)). "As adapted to *ex parte* procedure, *Graham* is interpreted as continuing to place the 'burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103'." *In re Piasecki*, 745 F.2d 1468 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d at 1016).

"The *prima facie* case is a procedural tool which, as used in patent examination (as by courts in general), means not only that the evidence of the prior art would reasonably allow the conclusion the examiner seeks, but also that the prior art compels such a conclusion if the applicant produces no evidence or argument to rebut it." *In re Spada*, 911 F.2d 705, 708 n.3 (Fed. Cir. 1990).

The applicant respectfully submits the Examiner has failed to meet the burden of proof required to establish a *prima facie* case of anticipation. Section 2131 of the Manual of Patent Examiner's Procedure provides:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference.’ *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053, (Fed. Cir. 1987). . . . ‘The identical invention must be shown in as complete detail as contained in the . . . claim.’ *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as in the claim under review *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).”

Claim 1 recites, “simultaneously processing image data for at least two pixels in a row of pixels, said at least two pixels comprising a first group of pixels and a last pixel, said last pixel abutting a group of pixels to be processed next” and “propagating . . . a second portion of said error word for said last pixel to a pixel in said group of pixels to be processed next.”

Nguyen states, “This invention proposes a method to achieve the parallelism of the error diffusion within an image row without sacrificing the quality of the output binary images. The method works by cutting each image row into a number of segments and error diffusing these segments in parallel. It utilizes two different error diffusion filters: the cut filter for the pixel just before the cuts and the normal filter for the rest of the pixels. *The cut filter must have zero weight for the right neighboring pixel in order to eliminate the dependencies among the segments*” (column 3, lines 55-64, emphasis added). Thus, Nguyen teaches away from “propagating . . . a second portion of said error word for said last pixel to a pixel in said group of pixels to be processed next” as recited by Claim 1. The Examiner’s rejection therefore is unsupported by the prior art, fails to establish a *prima facie* case of anticipation, and therefore should be withdrawn.

Claims 2-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of U.S. Patent No. 5,880,857 to Shiau *et al.* (“Shiau”). The applicant respectfully disagrees. Claims 2-11 depend from Claim 1 and should be deemed allowable for that reason and on their own merits. For the reasons argued above with respect to Claim 1, the prior art of record does not show, teach, or suggest the limitations of Claim 1, much less the limitations of

Claim 1 in combination with the additional limitations of the dependent claims.

Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of U.S. Patent No. 6,118,513 to Delabastita *et al.* ("Delabastita"). The applicant respectfully disagrees.

Claim 12 recites, "simultaneously processing image data for at least two pixels in a row of pixels, said at least two pixels comprising a first group of pixels and a last pixel, said last pixel abutting a group of pixels to be processed next . . . propagating a first portion of said error word for said last pixel to a pixel in said next row of pixels and a second portion of said error word for said last pixel to a pixel in said group of pixels to be processed next."

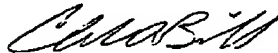
Nguyen states, "This invention proposes a method to achieve the parallelism of the error diffusion within an image row without sacrificing the quality of the output binary images. The method works by cutting each image row into a number of segments and error diffusing these segments in parallel. It utilizes two different error diffusion filters: the cut filter for the pixel just before the cuts and the normal filter for the rest of the pixels. *The cut filter must have zero weight for the right neighboring pixel in order to eliminate the dependencies among the segments*" (column 3, lines 55-64, emphasis added). Thus, Nguyen teaches away from "propagating . . . a second portion of said error word for said last pixel to a pixel in said group of pixels to be processed next" as recited by Claim 12. The Examiner's rejection therefore is unsupported by the prior art, fails to establish a prima facie case of anticipation, and therefore should be withdrawn.

Claims 13-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of Shiau, and Delabastita. The applicant respectfully disagrees. Claims 13-20 depend from Claim 12 and should be deemed allowable for that reason and on their own merits. For the reasons argued above with respect to Claim 12, the prior art of record does not show, teach, or suggest the limitations of Claim 12, much less the limitations of Claim 12 in combination with the additional limitations of the dependent claims.

In view of the amendments and the remarks presented herewith, it is believed that the claims currently in the application accord with the requirements of 35 U.S.C. § 112 and are allowable over the prior art of record. Therefore, it is urged that the pending claims are in

condition for allowance. Reconsideration of the present application is respectfully requested.

Respectfully submitted,



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